

CURRICULUM VITAE

PERSONAL:

Name: Sandra A. Harris-Hooker, Ph.D.

Business Address: Morehouse School of Medicine
720 Westview Drive, S.W.
Atlanta, Georgia 30310
(404) 752-1725 (phone)
(404) 752-1103 (fax)

Home Address: 125 Melanie Lane
Fairburn, Georgia 30213
(770) 719-0007

Date of Birth: January 29, 1952

Marital Status: Married, 1 child

EDUCATION:

1978 Ph.D., Atlanta University, Atlanta, GA - Developmental Biology
1976 M.S., Atlanta University, Atlanta, GA - Developmental Biology
1974 B.A., Dillard University, New Orleans, LA - Biology

POSTGRADUATE TRAINING:

1978-1981 Postdoctoral Fellow, Department of Pathology, Cardiovascular Research
Training Program University of Washington School of Medicine, Seattle, WA

PROFESSIONAL/ACADEMIC EXPERIENCE:

1981-1983 Assistant Professor, Department of Pathology, Boston University School of
Medicine, Boston, MA

1983-1986 Faculty Development Program, Morehouse School of Medicine, Atlanta, GA

1986-1987 Assistant Professor in Research, Department of Pathology, Morehouse School of
Medicine, Atlanta, GA

1987-1992 Assistant Professor, Departments of Medicine and Pathology, Morehouse
School of Medicine, Atlanta, GA

1990-1996 Program Coordinator, Minority Biomedical Research Support Program,
Morehouse School of Medicine, Atlanta, GA

1996-Present Program Director, Minority Biomedical Research Support Program, Morehouse
School of Medicine, Atlanta, GA

1987-1998 Chief, Division of Research, Department of Medicine, Morehouse School of
Medicine, Atlanta, GA

- 1992-Present Associate Professor, Department of Medicine (Secondary Appointment), Morehouse School of Medicine, Atlanta, GA
- 1992-2005 Associate Professor, Department of Pathology, Morehouse School of Medicine, Atlanta, GA
- 1998-1999 Director, Office for Research Development, Morehouse School of Medicine, Atlanta, GA
- 1999-2005 Associate Dean for Research Development, Morehouse School of Medicine, Atlanta, GA
- 2005- Present Professor, Department of Pathology (Primary Appointment) Morehouse School of Medicine, Atlanta, GA
- 2005-2008 Vice President & Associate Dean for Sponsored Research Administration, Morehouse School of Medicine, Atlanta, GA
- 2008 – Present Vice President & Senior Associate Dean for Research Affairs, Morehouse School of Medicine
- 2010- Present Interim Dean for Academic Affairs, Morehouse School of Medicine

PROFESSIONAL SOCIETIES:

- American Association for the Advancement of Science
- American Society for Cell Biology
- Society of Sigma Xi
- International Society on Hypertension in Blacks
- New York Academy of Sciences
- American Heart Association
- American Society for Gravitational and Space Biology
- International Society for Gravitational Physiology

HONORS AND APPOINTMENTS:

- Certificate of Appreciation, The CB²R Junior Faculty Development Program Spelman College, 2006
- Executive Leadership in Academic Medicine Fellow, 2003-2004
- Dean's Recognition Award, 2003
- Alpha Omega Alpha Honor Medical Society, 1995
- Dean's Faculty Recognition Award, 1992, 1995
- Outstanding Women of America, 1988
- Recipient of the Lederle Laboratories Outstanding Student Award for 1977-1978
- Recipient of a National Fellowship Fund Award 1977-1978
- Member of Beta Kappa Chi National Honor Society, Alpha Kappa Mu National Honor Society
- Student Member of the Dillard University Board of Trustees, 1973
- Who's Who Among Students in American Colleges and Universities, 1973
- Dean's Award for Institutional Services, 2008
- Journal of Ethnicity and Disease – Editorial Board, 2001 – Present
- National Space Biomedical Research Institute (NSBRI) Board of Directors, 2004 – Present
- International Society of Hypertension in Blacks, Board of Trustee, 2005 – Present
- Association for the Accreditation of Human Research Protection Programs, Inc., Board of Directors, 2005 – Present
- The Villages at Carver Family YMCA, Board of Directors, 2009- Present

PROFESSIONAL SERVICE:

Review Panels

- NIH/NCRR CTSA Review Panel, 2008
- NIH/NCMHD Research Endowment Review Panel, 2007-present
- NIH/NIGMS MARC Review Panel, 1998-2000
- Minority Access to Research Careers (MARC) Review Panel, 1998-2002
- AHA - Georgia/South Carolina Research Review Panel, 1993-1997
- NIH/NIGMS Pre-Council New Initiatives Review Panel, 2002 – Present
- NIH/NCMHD Loan Repayment Review Panel, 2002 – Present

External Committees:

- Chair of Spelman College Research Infrastructure in Minority Institutions (RIMI) External Advisory Committee 2003-present
- AAMC-Research Deans Steering Committee, 2000 – 2003
- International Society on Hypertension in Blacks - Symposium Committee, 1995-96, 2000-03
- American Heart Association (AHA) - Minority Task Force, 1997- 2000
- AHA - Georgia Affiliate Research Committee, 1996-1997
- NIGMS/MORE Programs Advisory Committee, 1995, 2003
- American Heart Association/Women in Atherosclerosis Steering Committee, 1994-1997
- NSF- Research in Minority Institutions (RIMI) Committee-Atlanta University Center, 1994
- Georgia Biomedical Partnership Committee, 2003 – Present

Institutional Standing Committees:

Current

- Center for Laboratory Animal Care Research Committee
- Graduate Education in Biomedical Science Council
- Institutional Facilities Planning Committee
- Research Development Committee
- Research Advisory Council
- Executive Management Team
- Intellectual Property Committee

Previous

- Admissions Committee
- Library Committee
- Research Development Committee (Chair)
- Faculty Representative to the Academic Policy Committee

Institutional Ad Hoc Committees:

Dean's G-5 Committee
Institutional Strategic Planning Committee
MBRS Advisory Committee
RCMI Internal Advisory Committee
Clinical Research Center Advisory Committee
Grants Administrative Management Systems Steering Committee (Chair)

IRB Self Study (Accreditation) Committee
Center of Excellence in Health Disparities Steering Committee
Student Research Day Planning Committee
Bioinformatics Working Group

FUNDING HISTORY:

I. Current Funding

NIH/NCRR, RCMI Center of Excellence for Clinical & Translational Research (RCTR), Period of Support: 9/2009 to 6/2014. Total Support: \$22,190,961 (Co-Investigator)

NIH/NIGMS, Research Initiative for Scientific Excellence (RISE) Program, Period of Support: 03/200 to 02/2013. Total Support: \$2,682,009 (Principal Investigator)

NIH/NCRR, Atlanta Clinical and Translational Science Institute (ACTSI), Period of Support: 9/2007 to 5/2012. Total Support: \$9,629,459 (Co-Investigator)

NIH/NIGMS SCORE Program at Morehouse School of Medicine, Period of Support: 8/2006 to 7/2010. Total Support: \$4,831,945 (Principal Investigator)

NIH/NCMHD, “Three Dimensional Approach to Eliminating Disparities in Health.” Period of Support: 9/2002 – 9/2010. Total Support: \$7,487,703. (Co-Investigator)

II. Previous Funding

NIH/NCMHD, “Center of Excellence Research Endowment Program”. Period of Support: 2006-2009, Total Support: \$15,000,000 (Co-Investigator).

OMH/NCMHD, “A Regional Coordinating Center to Mobilize NIH-Funded EXPORT Centers of Excellence on Health Disparities to Mitigate the Public Health Emergency Impact of Hurricane Katrina and Other Natural Disasters on High-Disparity Populations” Period of Support: 09/05-10/08, Total Support: \$5,000,000 (Co-Investigator).

NIH/NIGMS Postbaccalaureate Research Program in conjunction with Emory University, Period of Support: 10/02-06/07 (Co-Investigator).

NIH/NIGMS, “RISE Tissue Engineering and Molecular Histology Cores”. Period of Support: 08/03-07/06. Total Support: \$445,965 (Principal Investigator).

NIH/NCMHD, “Center of Excellence Research Endowment Program”. Period of Support: 2003-2006, Total Support: \$15,000,000 (Co-Investigator).

NIH/NCMHD, “Center of Excellence Research Endowment Program”. Period of Support: 2002 Total Support: \$5,000,000 (Co-Investigator).

NIH/NIGMS “Examining Possible Mechanisms of Vascular Remodeling Using In Vitro 3-D Blood Vessel Models,” Period of Support: 8/1998 to 7/2002. Total Support: \$528,642 (Principal Investigator)

NIH/RCMI, "Vascular Remodeling in Salt-induced Hypertension," Period of Support: 07/94 to 06/96. Total Support: \$171,440 (Co-Investigator)

NIH/NHLBI, "Enhancement of Cardiovascular and Related Research Areas," Period of Support 9/96 to 8/01. Total Support: \$3,100,000 (Co-Investigator)

Dialysis Clinics Inc., "The Effect of Recombinant Human Erythropoietin on Peritoneal Mesothelial Cell Integrity," Period of Support: 07/96 -0 6/99. Total Support: \$350,306 (Co-Investigator)

NIH/NIGMS "Cellular and Molecular Mechanisms of Vascular Remodeling," Period of Support: 8/1994 to 7/1998. Total Support: \$331,197 (Principal Investigator)

AHCPR, "MSM Medical Treatment Effective Center," Period of Support 1/92 to 8/97. Total Support: \$3,750,000 (Subproject Co-Investigator for Cardiovascular-related Studies)

Biomedical Research Support Grant, "The Use of the Chorioallantoic Membrane (CAM) as a Model for Studying Inflammatory Agents," Period of Support: 1985 to 1986. Total Support: \$2,000 (Principal Investigator)

NIH/RCMI Support Grant, "Mechanisms of Atherogenesis in Various Vascular Beds," Period of Support: 1986 to 1987. Total Support: \$5,000 (Principal Investigator)

NIH/NIGMS Thematic Grant Program, "In Vitro Model of Blood Vessels," Period of Support: 1986 to 1988. Total Support: \$110,617 (Co-Investigator)

NSF, "Research and Resource Center for Electron Microscopy in Atlanta University Center," Period of Support: 1989 to 1993. Total Support: \$380,000 (Co-Investigator)

USAID, "Destruction of Neural Vascular Endothelium by AIDS Virus Containing Macrophages," Period of Support: 1989 to 1992. Total Support: \$99,961 (Co-Investigator)

Dialysis Clinic Incorporated, "A Multidisciplinary Approach to Problems Associated with Cardiovascular-Related Disorders," Period of Support: 1990 to 1993. Total Support: \$309,000 (Co-Investigator)

NASA/HBCU, "Modulation of Vascular Wall Cell Function by Gravitational Stress," Period of Support: 1992 to 1993. Total Support \$240,000 (Subproject Principal Investigator)

NASA/HBCU, "Cellular Response to Hypogravity and Hypergravity Stress," Period of Support: 1992 to 1994. Total Support: \$322,000 (Co-Investigator)

NIH/NIGMS, "Influence of Extracellular Matrices on Regenerating Vascular Cells," Period of Support: 1990 to 1994. Total Support: \$224,173 (Principal Investigator)

NIH/NIGMS Shared Instrumentation Grant "Digitized Video Image Analysis System", 1989. Total Support: \$266,000 (Co-Investigator)

NASA/HBCU, "Cellular Response to Hypogravity and Hypergravity Stress," Period of Support: 1994 to 1995. Total Support: \$125,000 (Co-Investigator)

NIH/RCMI, "Vascular Remodeling in Salt-induced Hypertension," Period of Support: 07/96 to 06/99. Total Support: \$256,700 (Co-Investigator)

NIH/NIGMS RISE Program at Morehouse School of Medicine, Period of Support: 8/1998 to 7/2002. Total Support: \$3,361,388 (Principal Investigator)

PUBLICATIONS

1. Kumar R, Harris-Hooker S and Sanford G (2008). The expression of growth factors and their receptors in retinal and endothelial cells co-cultured in the rotating bioreactor, *Ethnicity and Disease* 18 [Suppl 2]: 44-50. (peer-reviewed)
2. Harris-Hooker S (2008). Morehouse School of Medicine A Model for Research Excellence. *GEORGIA TREND*, 2008 (not peer-reviewed)
3. Jefferson, M., Nokkaew C., Sanford GL, and Harris-Hooker S., Hypoxia Preconditioning Modulates Endothelial Cell Response to Subsequent Injury (In preparation, 2009)
4. Higginbotham, E and Harris-Hooker, S. Morehouse School of Medicine. Scene of Groundbreaking Life Sciences Research in Shaping Infinity p. 20 – 22, 2007
5. Harris-Hooker, Ensuring the Future of Research at Morehouse School of Medicine. *Atlanta Medicine* 79(1):14-18, 2006
6. Dutt K, Harris-Hooker S, Ellerson D, Layne D and Hunt R. Generation of 3D retina like structures from a human retinal cell line in a NASA bioreactor. *Cell Transplantation* 2(7):717-731, 2003.
7. Dutt K, Harris-Hooker S, Sanford G, Brako L, Ravindra K, Sroufe A and Melhado C. "Three-dimensional model of angiogenesis: Co-culture of human retinal with bovine aortic endothelial cells in the NASA bioreactor. *Tissue Engineering* 9(5):893-908, 2003.
8. Sanford G, Ellerson D, Mehado-Gardener C and Harris-Hooker S. 3D growth of endothelial cells and the microgravity-based rotary wall vessel bioreactor. *In Vitro Cell Devel. Biol.* 38:493-504, 2002.
9. Bosah F, Sanford G, Tan W and Harris-Hooker S. PDGF role in mitogen-activated protein kinase activation and proliferation of vascular smooth muscle cells isolated from Dahl hypertensive rats (Submitted to *Cell Biol Internat*).
10. Harris-Hooker S, Lee P, Rivers R and Sanford G. Characterization of a 3-dimensional co-culture model of the vascular wall. *Exp Cell Res* (Manuscript in preparation).
11. Bosah F.N., Sanford G.L., Tan W. and Harris-Hooker. Antisense oligodeoxynucleotides of galectin-1 inhibits adhesion and migration of vascular smooth muscle cells. (Submitted to *Biochemistry and Cell Biology*).
12. Bosah F.N., Sanford G.L., Tan W. and Harris-Hooker. Developing a recombinant cell model to study the biochemical and physiological roles of galaptin (Manuscript in preparation).
13. Quaye E, Alema-Mensah E, Omeogu C, Alvarez D, Dwamena F and Harris-Hooker S. Lack of adequate diagnosis and treatment of hypertension in an urban hypertensive population. *Journal Ethnicity and Disease* 11(3) 454-463, 2001.
14. Donaldson C, Cooper C, Harris-Hooker S, Emmett E, Scanlon M and Cooke D. Cytoskeletal organization and cell motility correlates with metastatic potential and state of differentiation in prostate cancer. *J Cell Mol Biol* 47(6):1033-1038, 2001.
15. Sanford G, Harris-Hooker S, Bosah F and Tan W. Regulation of the synthesis β -galactoside specific lectin by dexamethasone in cultured vascular smooth muscle and pulmonary endothelial cells. *Georgia J Science* 57: 199-209, 1999.

16. Bayorh M, Williams E, Thierry-Palmer M, Sanford G, Emmett N, Harris-Hooker S, Socci R and Chu T. Enhanced nitric oxide synthesis reverses salt-induced alterations in blood flow and cGMP levels. *Clin Exper Hyperten* 21:333-352, 1999.
17. Sanford G, Harris-Hooker S, Lui J, Melhado-Gardner C, Pink Y, Wallace T and Bosah F. Influence of changes in gravity on the response of lung and vascular cells to ischemia/reperfusion in vitro. *Journal Gravitational Physiology* 6:P27-28, 1999.
18. Sanford G, Harris-Hooker S, Lui J and Bosah F. Wound healing following injury to vascular smooth muscle cell cultures is modulated by culture under hypergravity. *Journal Gravitational Physiology* 6:P29-30, 1999.
19. Thierry-Palmer M, Carlyle K, Williams M, Caines-McKenzie S, Bayorh M, Tewolde T, Emmett N, Harris-Hooker S, Sanford G and Williams E. Plasma 25-hydroxyvitamin D concentrations are inversely associated with blood pressure of salt-sensitive rats. *J. Steroid Biochem and Molec Biol* 66:255-261, 1998.
20. Bayorh M, Ogbolu E, Williams E, Thierry-Palmer M, Sanford G, Emmett N, Harris-Hooker S, Socci R, Chu T and Chenault V. Possible mechanisms of salt-induced hypertension in Dahl salt-sensitive rats. *Physiol Behavior* 65:563-568, 1998.
21. Sung J, Harris-Hooker S, Alema-Mensah E and Mayberry R. Prevalence of hypertension in a medicaid population. *Ethnicity & Disease* 7:19-26, 1997.
22. McCloud H, Pink Y, Harris-Hooker S, Melhado C and Sanford G. Hypergravity alters the susceptibility of cells to anoxia-reoxygenation injury, In: *NASA University Research Centers: Technical Advances in Education, Aeronautics, Space, Autonomy, Earth and Environment, Vol. 1*, Jamshidi M, et al., eds. pp. 897-901, 1997.
23. Love F, Melhado C, Bosah F, Harris-Hooker S and Sanford G. Calmodulin-dependent protein kinase mediates hypergravity-induced changes in F-actin expression by endothelial cells, In: *NASA University Research Centers: Technical Advances in Education, Aeronautics, Space, Autonomy, Earth and Environment, Vol. 1*, Jamshidi M, et al., eds. pp. 881-884, 1997.
24. Melhado C, Sanford G and Harris-Hooker S. Endothelial cell morphology and migration are altered by changes in gravitational field. In: *NASA University Research Centers: Technical Advances in Education, Aeronautics, Space, Autonomy, Earth and Environment, Vol. 1*, Jamshidi M, et al., eds. pp.513-517, 1997.
25. Love F, Melhado C, Bosah F, Harris-Hooker S and Sanford G. Protein kinases possibly mediate hypergravity-induced changes in F-actin expression by endothelial cells. In: *NASA University Research Centers: Technical Advances in Aeronautics, Space Sciences and Technology, Earth Systems Sciences, Global Hydrology, and Education, Vol. III*, Coleman TL, et al., eds. pp. 480-482, 1998.
26. Melhado C, Sanford G and Harris-Hooker S. Simulated microgravity induced cytoskeleton rearrangement is modulated by protooncogenes. In: *NASA University Research Centers: Technical Advances in Aeronautics, Space Sciences and Technology, Earth Systems Sciences, Global Hydrology, and Education, Vol. III*, Coleman T.L. et al., eds pp. 45-48, 1998.
27. Sung J, Alema-Mensah E, Mayberry R and Harris-Hooker S, I. Prevalence of hypertension in a medicaid population. *Ethnicity & Disease* 7:19-26, 1997.
28. Harris-Hooker S and Sanford G. Lipids, lipoproteins and coronary heart disease in minority populations. *Atherosclerosis* 108 (Suppl.) S83-104, 1994.
29. Cooper C, Emmett N, Harris-Hooker S, Patterson R and Cooke D. Biometric assessment of prostate cancer metastatic potential. *World J Urology* Vol 12(6): 304-307, 1994.
30. Cooper C, Emmett, N, Harris-Hooker, S and Cooke D. Adhesion and invasion potential of rat prostate cancer cells: A correlation with metastatic potential. *Invasion and Metastasis* 13:178-184, 1994.
31. Harris-Hooker S, Sanford G., Montgomery V, Rivers R and Emmett N. Influence of low density lipoproteins on vascular smooth muscle cell growth and motility: Modulation by extracellular matrix. *Cell Biology and International Reports* 16(5):433-450, 1992.

32. Sung J, Harris-Hooker S, Schmid G, Ford E, Simmons B, Reed J. Racial differences in mortality from cardiovascular disease in Atlanta, 1979-85. *J. Natl. Med. Assoc* 84(3):259-263, 1992.
33. Dutt K, Scott M, Del Monte M, Brennan M, Harris-Hooker S, Kaplan H, Verly G. Extracellular matrix mediated growth and differentiation in human pigment epithelial cell line 0041. *Current Eye Research* 10:1089-1100, 1991.
34. Sanford G and Harris-Hooker S. Stimulation of vascular cell proliferation by beta-galactoside specific lectin. *FASEB J* 4:2912-2918, 1990.
35. Srivastava R, Harris-Hooker S and Sridaran R. Inhibitory effects of in vivo and in vivo treatment of a LHRH antagonist (NAL-LYS ANTIDE) on progesterone levels during early pregnancy in the rat. In: *Regulation of gene expression in the ovary*. G. Giboni, Ed., Plenum Press, New York, 1990.
36. Williams E, Udofia U, Harris-Hooker S and Gordon, P. Adenosine transporters in vascular smooth muscle and endothelium: Multiple [³H] nitrobenzylthioinosine binding sites in human umbilical vein endothelium. *Drug Development Research* 19:79, 1990
37. Sridaran R, Srivastava R and Harris-Hooker S. Suppression of luteal production of progesterone in vitro by a gonadotropin releasing hormone agonist during pregnancy. In: *Regulation of gene expression in the ovary*. G. Giboni, Ed., Plenum Press, New York, 1991.
38. Leitch G, Harris-Hooker S and Udezulu I. Movement of *Entamoeba Histolytica* trophozoites in rat cecum and colon intact mucus blankets and harvested mucus gels. *Am J Trop Med Hyg* 39(3):282-287, 1988.
39. Gajdusek C and Harris-Hooker S. In vitro and in vivo effects of endothelial cell-derived growth factor. In: *Cell Culture in Support of Bioscience* (Eds. R.T. Acton and J.D. Lynn). Plenum Press, New York, 1986.
40. Haudenschild, C.C. and Harris-Hooker, S.A. Endothelial cell motility. In: *The Biology of Endothelial Cells*. (eds., E.A. Jaffe) Martin Nijhoff Publishers, The Netherlands, 1984.
41. Gajdusek C and Harris-Hooker S. In vitro and in vivo effects of endothelial cell derived growth factor. *Adv Exp Med Biol* 172:179, 1984.
42. Harris S, Gajdusek C, Wright T and Schwartz S. Neovascular responses induced by cultured endothelial cells. *J Cell Physiol* 114(3):302-310, 1983.
43. Haudenschild C and Harris-Hooker S. Injury affects endothelial integrity beyond physical location of the damage. *Circulation Supplement* 66:205, 1982.

ABSTRACTS

1. Harris-Hooker S., Kumar R., Dutt K. and Sanford G.L. The Expression of Growth Factors and Their Receptors in Retinal and Endothelial Cell Co-Cultured in Bioreactor (10th International RCMI Symposium) 2006
2. Harris-Hooker S., Elimination of Health Disparities (Urban League Annual Meeting) 2006.
3. Harris-Hooker S., After the Storm – The Katrina Project (NAFEO Meeting) 2006.
4. Harris-Hooker, S. Healthy People 2010: The Five year Bench Mark. *Journal of Ethnicity & Disease*. (in preparation)
5. Sanford GL, Sroufe AE, Ellerson D, Hunter M, Bosah F and S. Harris- Hooker. Altered growth and gene expression by endothelial cells cultured in a microgravity-based rotating bioreactor. *FASEB J* 16:A437, 2002.
6. Harris-Hooker S, Rivers R and Sanford GL. Cellular mediators of vascular smooth muscle behavior. *Ethnicity and Disease* 12:11, 2002.
7. Russell LH, Ellerson D, Harris-Hooker S and Sanford GL. Endothelial cell oxidation of LDL is modulated by culture in a microgravity-like environment. *Georgia J. Sci.* 60:51, 2002.

8. Smith D, Reid L, Ellerson D, Harris-Hooker S and Sanford GL. Culture of endothelial cells in the microgravity-based rotating bioreactor results in a reduced angiogenic response. *Georgia J. Sci.* 60:53, 2002.
9. Staples, MJ, Harris-Hooker, S, Sanford, G, Nokkaew, N and Williams M. Upregulation of ICAM-1 Expression by Hypoxia Preconditioning of Endothelial Cells in Vitro. Annual Biomedical Research Conference for Minority Students, New Orleans, LA, November 13-16, 2002.
10. Smith, D, Ellerson, D, Harris-Hooker, S and Sanford, GL. Down-Regulation of the bFGF Receptor Underlying Decreased Antiogenic Response of Endothelial Cell Cultured in the NASA Rotating Bioreactor, Annual Biomedical Research Conference for Minority Students, New Orleans, LA, November 13-16, 2002
11. Reid, L, Ellerson, D, Harris-Hooker, S and Sanford, GL. Possible Regulations of VEGF Receptors Underlying Decreasing Angiogenic Response of Endothelial Cells Cultured in the NASA Rotating Bioreactor. Annual Biomedical Research Conference for Minority Students, New Orleans, LA, November 13-16, 2002.
12. Russell, LH, Ellerson, D, Harris-Hooker, S and Sanford GL. Endothelial cell oxidation of LDL is modulated by culture in a microgravity-like environment. Presented at the Morehouse School of Medicine Fourteenth Annual Curtis L. Parker Student Research Day Symposium, Atlanta, GA. February 22, 2002.
13. Smith, D, Reid L, Ellerson, D, Harris-Hooker, S and Sanford GL. Culture of endothelial cells in the microgravity-based rotating bioreactor results in a reduced angiogenic response. Presented at the Morehouse School of Medicine Fourteenth Annual Curtis L. Parker Student Research Day Symposium, Atlanta, GA, February 22, 2002.
14. Harris-Hooker S, Ellerson D, Bosah F, and Sanford GL. Bradykinin stimulation of endothelial cell nitric oxide production is mediated by actin organization and glucose concentration. *Ethnicity & Disease* 11 (2): 365, 2001.
15. Bosah F, Harris-Hooker S and Sanford GL. The effects of hypergravity on the expression of nitric oxide synthase by endothelial cells: role of the f-actin cytoskeleton and c-jun N-terminal kinase. *ASGSB Bulletin* 13:131, 2000.
16. Harris-Hooker S, Sanford GL, Lee P, Bosah F and Rivers R. Construction of a blood vessel model in vitro using isolated vascular cells. *Ethnicity & Disease* 10:57, 2000.
17. Harris-Hooker S, Sanford G, Bosah F, Williams V, Emmett N, Colden-Stanfield M., Thierry-Palmer M, Bayorh M and Williams E. Vascular cells isolated from Dahl salt sensitive rats: Early signaling pathways mediating growth. *Ethnicity & Disease* 9:309, 1999.
18. Dutt K, Douglas P, Layne D, Harris-Hooker S, Sanford G, Tufon R and Ellerson D. Tissue engineering of human retina in NASA bioreactor. *Grav Space Biol Bull* 13:66, 1999.
19. Harris-Hooker S, Sanford G, Bosah F, Rivers R and Hunter M. Altered vascular smooth muscle cell proliferation and migration by conditioned media from dysfunctional endothelial cells. *The Physiologist* 14(4):249, 1998.
20. Ellerson D, Sanford G, Harris-Hooker S, Melhado-Gardner C and Bosah F. Three dimensional culture of endothelial cells show increased nitric oxide production. *The Physiologist* 14(4):278, 1998.
21. Ellerson D, Sanford G, Harris-Hooker S and Melhado C. Characterization of 3-dimensional vascular cell co-cultures maintained in the rotating bioreactor. *Gravitational and Space Biology Bulletin* 12(2):40, 1998.
22. Sroufe A, Sanford G, Harris-Hooker S, Ellerson D and Dutt K. Modeling of blood-brain barrier by 3-dimensional co-culture of astrocytes and endothelial cells in the microgravity-based rotating bioreactor. *Gravitational and Space Biology Bulletin* 12(2):40, 1998.

23. Harris-Hooker S, Sanford G, Bosah F, Rivers R and Hunter M. Altered vascular smooth muscle cell proliferation and migration by conditioned media from dysfunctional endothelial cells. *The Physiologist* 14(4):249, 1998.
24. Bosah F, Harris-Hooker S, Sanford G, Emmett N, Colden-Stanfield M, Thierry-Palmer, Bayorh M, Williams E and Blackburn T. Vascular cells isolated from Dahl salt sensitive rats maintained on high salt have altered responses to TGF- β . *The Physiologist* 14(4):269, 1998.
25. Ellerson D, Sanford G, Harris-Hooker S and Melhado-Gardner C and Bosah F. Three dimensional culture of endothelial cells show increased nitric oxide production. *The Physiologist* 14(4):278, 1998.
26. Ellerson D, Sanford G, Harris-Hooker S and Melhado C. Characterization of 3-dimensional vascular cell co-cultures maintained in the rotating bioreactor. *Gravitational and Space Biology Bulletin* 12(2):40, 1998.
27. Sroufe A, Sanford G, Harris-Hooker S, Ellerson D and Dutt K. Modeling of blood-brain barrier by 3-dimensional co-culture of astrocytes and endothelial cells in the microgravity-based rotating bioreactor. *Gravitational and Space Biology Bulletin* 12(2):40, 1998.
28. Sanford G, Harris-Hooker S, Melhado-Gardner C, Bosah F and Liu J. Characterization of cytoskeleton alterations in endothelial cells subjected to rotary shear stress. *The Physiologist* 14(4):249, 1998 .
29. Sanford G, Harris-Hooker S, Melhado-Gardner C, Bosah F and Liu J. Characterization of cytoskeleton alterations in endothelial cells subjected to rotary shear stress. *The Physiologist* 14(4):249, 1998.
30. Harris-Hooker S, Sanford G, Smith M, Caines-McKenzie S, Bayorh M, Colden-Stanfield M, Emmett N, Thierry-Palmer M, and Williams E. Isolation and characterization of vascular endothelial and smooth muscle cells from Dahl hypertensive rats. *Ethnicity and Disease* 7:S38, 1997.
31. Bosah FN, Sanford GL and Harris-Hooker S. Salt-induced changes in vascular smooth muscle cell growth and migration in hypertensive Dahl rats. *Microcirculation* 4(1):112, 1997.
32. Harris-Hooker S, Sung J, Alema-Mensah E and Mayberry R. Controlled and uncontrolled hypertension in the Stroke and Heart Attack Prevention Programs. *International Society on Hypertension in Blacks, Inc.*, 1997.
33. Bosah FN, Sanford GL and Harris-Hooker S. Salt-induced changes in vascular smooth muscle cell growth and migration in hypertensive Dahl rats. *Microcirculation* 4(1):112, 1997.
34. Bayorh MA, Williams E, Thierry-Palmer M, Sanford GL, Emmett NL, Harris-Hooker S, Socci R, and Chu TC. L-arginine and salt-induced hypertension. *FASEB J*, 1997.
35. Thierry-Palmer M, Carlyle KS, Williams MD, Caines-McKenzie S, Bayorh MA, Emmett NL, Harris-Hooker SA, Sanford GL and Williams E. Plasma levels of 25-hydroxyvitamin D are decreased in salt-induced hypertension. *FASEB J* 10:LB147, 1996.
36. Sanford G, Melhado C, Hunt S and Harris-Hooker, S. Hypergravity-induced changes in vascular cell area is modulated by serum levels. *Gravitational and Space Biology Bulletin* 10:117, 1996.
37. Bosah FN, Sanford GL, Harris-Hooker SA, and Bettis B. Galaptin Expression is required for Vascular Smooth Muscle Cell Migration during Vascular Remodeling, *FASEB J* 9:243, 1995.
38. Melhado CD, Sanford GL, Powell SA and Harris-Hooker SA. Alterations in endothelial cell sheet migration by hypergravity and stimulated microgravity. *FASEB J*. 9(Part II):5063, 1995.
39. Harris-Hooker S, Sung J and Alema-Mensah E. Treatment of hypertension in the Georgia Medicaid population. *Tenth International Society on Hypertension in Blacks, Inc.*, St. Thomas, VI, 1995.
40. Matheravidathu SS, Marshall G, Sanford GL and Harris-Hooker S. Protooncogene expression of vascular cells responding to mechanical injury in vitro. *FASEB J*. 9 (Part II):1568, 1995.
41. Dutt K, Harris-Hooker S and Rivers R. Induction of capillary-like structures by secreted factors. *ARVO*, 1995.

42. Harris-Hooker S, Sung, J, Alema-Mensah E and Emmett N. Occurrence and treatment of hypertension in the Georgia Medicaid population. Ninth International Society on Hypertension in Blacks, Inc., Cleveland, OH, 1994.
43. Emmett N, Archibold E, Cheeks V and Harris-Hooker S. A biochemically functional artificial gene coding for Angiotensin II. 14th Scientific meeting of the International Society of Hypertension, 1992.
44. Bettis B, Harris-Hooker S, Rivers R and Sanford G. The effects of high density and low-density lipoproteins on cholesterol uptake of vascular smooth muscle cells. *FASEB* 6:2239, 1992.
45. Hutto C, Rivers R, Sanford G and Harris-Hooker S.. Effects of prostaglandin E1 on vascular cell growth and motility. *FASEB J* 5:7185, 1991.
46. Smith C, Odusanya S, Harris-Hooker S and Sanford GL. Modulation of the effect of lung β -galactoside specific lectin on vascular smooth muscle cells by extracellular matrix components. *FASEB J.*, 5:2642, 1991.
47. Harris-Hooker S, Sanford GL, Bettis B and Rivers R. Modulation of the uptake of low-density lipoproteins in vascular smooth muscle cells by high-density lipoproteins and extracellular matrix components. *J. Cell Biol.* 115:2582, 1991.
48. Tan W, Sanford GL, Odusanya B and Harris-Hooker S. Effect of dexamethasone on the expression of the 14 kD-galactoside specific lectin by rat lung fibroblasts. *J. Cell Biol.* 115:2626, 1991.
49. Sanford G, Odusanya B and Harris-Hooker, S. Influence of thyroid hormone on dexamethasone alteration of postnatal lung lectin expression. *Am Rev Resp Dis*, 141:A823, 1990.
50. Sanford G, Odusanya B and Harris-Hooker, S. Influence of thyroid hormone on dexamethasone alteration of postnatal lung lectin expression. *Am Rev Resp Dis*, 141:A823, 1990.
51. Harris-Hooker S, Sanford G, Montgomery V and Dukes L. Influence of low-density lipoproteins on vascular smooth muscle cells. *J Cell Biol* 109:1784, 1989.
52. Cooke D, Emmett N, Harris-Hooker S and Sanford G. Prostate cancer cell growth and motility using video image analysis. *J Cell Biol* 109:1785, 1989.
53. Tan W, Sanford GL, Odusanya B and Harris-Hooker S. Effect of dexamethasone on the expression of the 14 kD-galactoside specific lectin by rat lung fibroblasts. *J Cell Biol* 115:2626, 1991.
54. Harris-Hooker S, Sanford G, Montgomery V and Dukes L. Influence of low-density lipoproteins on vascular smooth muscle cells. *J Cell Biol* 109:1784, 1989.
55. Cooke D, Emmett N, Harris-Hooker S and Sanford G. Prostate cancer cell growth and motility using video image analysis. *J Cell Biol* 109:1785, 1989.
56. Harris-Hooker S, Sanford G and Emmett N. The effects of adenosine on the inhibition of DNA synthesis by endothelial cell membranes. *FASEB J* 2:2499, 1988.
57. Emmett N, Harris-Hooker S and Archibold E. Effect of saralasin on 3T3 cell proliferation: Cellular actions. *FASEB Journal* 2:2505, 1988.
58. Williams E, Harris-Hooker S. and Gordon P. Adenosine transporters in vascular smooth muscle and endothelial cells. *Fed. Proc.* 46:404, 1987.
59. Williams E, Udofia U, Harris-Hooker S and Gordon P. Affinity of vasodilators for nucleoside transporters in vascular smooth muscle and endothelium. *Am. Soc. for Phar. and Exp. Therapeutics* 29(3):127, 1987.
60. Dutt K, Harris-Hooker S, Delmonte M, Kaplan H. and Verly G. Characterization of human epithelial cell line 0041 grown on biomatrices. *J. Cell Biol.* 103:1782, 1986.
61. Emmett N, Archibold S, Harris-Hooker S and Dukes L. Effects of saralasin (Angiotensin II Antagonist) on 3T3 cell growth and proliferation. *J. Cell Biol.* 103:630, 1986.
62. Emmett N and Harris-Hooker S. The inhibition of cultured smooth muscle cell growth by saralasin. *Fed. Proc.* 45:2501, 1986.
63. Harris-Hooker S, Emmett N and Dutt K. Influence of synthetic vascular wall matrices on cell growth characterization. *J. Cell Biol.* 103:377, 1986.

64. Harris-Hooker S and Sanford G. Stimulation of vascular cell proliferation by beta-galactoside specific lectin. Fed. Proc. 45:2911, 1986.
65. Sanford G and Harris-Hooker S. Cellular studies of beta-galactoside specific lectin in vascular cells. J. Cell Biol. 103:725, 1986.
66. Sanford G and Harris-Hooker S. The effects of dexamethasone on the synthesis and secretion of galaptin by vascular smooth muscle cells. Fed. Proc. 45:542, 1986.
67. Haudenschild CC, Wallstrom A and Harris-Hooker S. Quantitative motility analysis of cell populations in monolayers. J. Cell Biol. 97:294a, 1983.
68. Harris S, Gajdusek C, Schwartz S and Wright T. The stimulatory effect of heparin on proteoglycan biosynthesis by arterial smooth muscle cells in vitro. Fed Proc 40:342(623), 1981.
69. Harris S, Gajdusek C, Wright T, Schwartz S. Role of endothelial cell products in vascular growth responses and neovascularization. J. Cell Biol. 83:104a 1979.

PRESENTATIONS

1. Jefferson M., Nokkaew C., Sanford GL, and Harris-Hooker S., Hypoxia Preconditioning Modulates Endothelial Cell Response to Subsequent Injury (Annual Biomedical Research Conference for Minority Students) 2006.
2. Harris-Hooker, S, Davies, N, Ellerson, D and Sanford, GL. Up Regulation of Nitric Oxide by Simulated Microgravity or Extended Bed rest Potential Cause of Orthostatic Intolerance. International Society on Hypertension in Blacks, July 2005.
3. Sanford, GL, Ellerson, D, Davies, N, and Harris-Hooker, S. Three-dimensional growth of blood vessel endothelial cells in the horizontally rotating bioreactor. Georgia Life Sciences Summit 2004, Atlanta, Georgia, September 22, 2004.
4. Larkins, TL, Brandon, BC, Ellerson, D, Nowell, M, Sanford, GM, Harris-Hooker, S and Sanford, GL. Role of Nitric oxide and COX-2 in breast cancer progression. Georgia Life Sciences Summit 2004. Georgia Life Sciences Summit 2004, Atlanta, Georgia, September 22, 2004
5. Jefferson, M, Harris-Hooker, S, Nokkaew, C, Larkins, T, and Sanford, GL. Hypoxia Pre-Conditioning Enhances the Response of Endothelial Cells to a Denudation Injury, Annual Biomedical Research Conference for Minority Students, Dallas, TX, November 10-13, 2004.
6. Sanford, GL, Harris-Hooker, S, Ellerson, D, Davies, N, Sroufe, A. Signaling Mechanisms Underlying Enhanced Nitric Oxide Production by Endothelial Cells Cultured in a Microgravity-Based Rotating Bioreactor. NASA Cell Science Annual Investigators Meeting, 2004.
7. Dutt, K, Harris-Hooker, S, Sanford, G. Three Dimensional Co-Culture Model of Angiogenesis with Enhanced Differentiation Using the Horizontally Rotating Bioreactor. International Society for Applied Cardiovascular Biology 9th Biennial Meeting, 2004.
8. Sanford GL, Harris-Hooker S, Ellerson D, Davies N and Sroufe A. Signaling Mechanisms Underlying Enhanced Nitric Oxide Production by Endothelial Cells Cultured in a Microgravity-Based Rotating Bioreactor. NASA Cell Science Annual Investigators Meeting, 2004.
9. Harris-Hooker S and Satcher D. Three Dimensional Approach to Eliminating Health Disparities (Invited). 4th Annual Biomedical Research Symposium, Tuskegee University, 2003.
10. Reid L, Ellerson D, Harris-Hooker S and Sanford GL. Possible Regulations of VEGF Receptors Underlying Decreasing Angiogenic Response of Endothelial Cells Cultured In the NASA Rotating Bioreactor. Annual Biomedical Research Conference for Minority Students, New Orleans, LA, November 13-16, 2002.
11. Smith D, Ellerson D, Harris-Hooker S and Sanford GL. Down-Regulation of the bFGF Receptor Underlying Decreased Angiogenic Response of Endothelial Cell Cultured in the NASA Rotating Bioreactor, Annual Biomedical Research Conference for Minority Students, New Orleans, LA, November 13-16, 2002.

12. Staples MJ, Harris-Hooker S, Sanford G, Nokkaew N and Williams M. Upregulation of ICAM-1 Expression by Hypoxia Preconditioning of Endothelial Cells In Vitro. Annual Biomedical Research Conference for Minority Students, New Orleans, LA, November 13-16, 2002.
13. Harris-Hooker S, Sanford G and Williams, V. Characterization and function of a 3-dimensional co-culture model of the vascular wall. *Exp Cell Res*, 2000.
14. Harris-Hooker S, Sanford G and Williams, V. An Assessment of Vascular Endothelial Layer Permeability in a 3-D Blood Vessel Model Following Mechanical or Chemical Injury, National Minority Research Symposium, 1999.
15. Harris-Hooker S, Sanford G, Williams V, Bettis B and Rivers R. The Role of Nitric Oxide on the Production and Behavior of Vascular Cells, National Minority Research Symposium, 1998.
16. Sung JFC, Alema-Mensah E and Harris-Hooker S. Comparison between Controlled and Uncontrolled Hypertensives Enrolled in Stroke and Heart Attack Prevention Programs. Association for Health Services Research 14th Annual Meeting, Chicago, IL, 1997.
17. Harris-Hooker S, Sung J, Alema-Mensah E and Mayberry R. Controlled and uncontrolled hypertension in the Stroke and Heart Attack Prevention Programs. International Society on Hypertension in Blacks, Inc., 1997.
18. Enhora F, Bosah F, Harris-Hooker S and Sanford G. Galactin mediates the effect of hypergravity on vascular smooth muscle cell (SMC) adhesion to laminin containing matrices. Proceedings of the NASA University Research Center Symposium, 1996.
19. Hunt S, Bettis B, Harris-Hooker S and Sanford G. Simulated hypergravity alters vascular smooth muscle cell proliferation and motility. NASA University Research Center Symposium, 1996.
20. Enhora F, Bosah F, Harris-Hooker S and Sanford G. Galactin mediates the effect of hypergravity on vascular smooth muscle cell (SMC) adhesion to laminin containing matrices. Proceedings of the NASA University Research Center Symposium, 1996.
21. Hunt S, Bettis B, Harris-Hooker S and Sanford G. Simulated hypergravity alters vascular smooth muscle cell proliferation and motility. NASA University Research Center Symposium, 1996.
22. Lawrence L, Rivers R and Harris-Hooker S. The Effects of endothelial Cell (EC) conditioned media on smooth muscle cell (SMC) proliferation and migration. NIGMS Minority Programs Symposium, Washington, DC., 1995.
23. Sanford, GL, Melhado, C, Pink Y, Powell, S and Harris-Hooker, S. Does altered gravity stimulations affect the susceptibility of lung and vascular cells to anoxia-reoxygenation injury? NASA/AIAA Life Science and Space Medicine Conference, Houston, TX, April 3-6, 1995.
24. Harris-Hooker, S, Melhado, C, Bryant, LT, Bettis, B and Sanford, GL. Simulated microgravity and hypergravity alters vascular cell morphology and motility. NASA/AIAA Life Science and Space Medicine Conference, Houston, TX, April 3-6, 1995.
25. Dutt K, Harris-Hooker S, Rivers R. Induction of capillary-like structures by secreted factors. *ARVO*, 1995.
26. Lee P, Sanford G and Harris-Hooker, S. Cell-matrix Interaction: Characterization of an in vitro blood vessel. NIGMS Minority Programs Symposium, Washington, DC., 1995.
27. Harris-Hooker, S and Sanford, G. Lipids, lipoproteins and coronary heart disease in minority populations. *Frontiers in lipid and lipoprotein research: basic science, analytical and clinical applications*, Centers for Disease Control. 1993.
28. Harris-Hooker, S. Multifunctional Control of SMC Growth: Modulation by Extracellular Matrix Components. Cleveland Clinic Foundation, 1993.
29. Naugles K, Scanlon M, Emmett N, Rivers R and Harris-Hooker S. DNA Synthesis and calcium flux in vascular smooth muscle cells. *MSM Student Research Day*, 1992.
30. Scanlon M, Emmett N, Naugles K, Rivers R and Harris-Hooker S. Synergistic effects of PDGF and AII on rat vascular smooth muscle cells. *ASCB*, 1992.
31. Scanlon M, Emmett N, Naugles K, Rivers R. and Harris-Hooker S. Synergistic effects of PDGF and AII on rat vascular smooth muscle cells. *ASCB*, 1992.

32. Gajdusek C, Harris S and Schwartz S. Role of endothelial cell products in vascular growth responses and neovascularization. Second International Austrian Conference on Atherosclerosis, 1981.